

What is Claimed is:

1. A method of forming a unitary-formed electrode structure serving as both a collector and a polarization electrode, said method comprising the single step of:

mixing a polarization electrode material into at least a part of a surface region of a base material having an electrical conductivity, so that at least said polarization electrode material is partially shown on said surface region of said base material.

2. The method as claimed in claim 1, further comprising the single step of:

removing a surface part of said base material to increase an area of said shown polarization electrode material from said surface region of said base material.

3. The method as claimed in claim 2, wherein said surface part of said base material is removed by a plasma irradiation.

4. The method as claimed in claim 2, wherein said surface part of said base material is removed by a heat treatment.

5. The method as claimed in claim 2, wherein said surface part of said base material is removed by an ozone irradiation.

6. The method as claimed in claim 2, wherein said surface part of said base material is removed by making said surface part of said base material into contact with an organic solvent.

7. The method as claimed in claim 2, wherein said base material is sheet-shaped and said surface part to be removed is one side of said sheet.

8. A method of forming an electric double layer capacitor, said method comprising the steps of:

mixing a polarization electrode material into at least a part of a surface region of a base material having an electrical conductivity for serving as said collector, so that at least said polarization electrode material is partially shown on said surface region of said base material;

removing a surface part of said base material to increase an area of said shown polarization electrode

material from said surface region of said base material, thereby forming at least a pair of unitary-formed electrode structures serving as both a collector and a polarization electrode;

permeating an electrolyte into said unitary-formed electrode structures; and

placing said unitary-formed electrode structures to sandwich a separator.

9. The method as claimed in claim 8, wherein said unitary-formed electrode structures are placed so that surface-removed sides of said unitary-formed electrode structures are in contact with said separator.

10. The method as claimed in claim 8, wherein said surface part of said base material is removed by a plasma irradiation.

11. The method as claimed in claim 8, wherein said surface part of said base material is removed by a heat treatment.

12. The method as claimed in claim 8, wherein said surface part of said base material is removed by an ozone irradiation.

13. The method as claimed in claim 8, wherein said surface part of said base material is removed by making said surface part of said base material into contact with an organic solvent.

14. The method as claimed in claim 8, wherein said base material is sheet-shaped and said surface part to be removed is one side of said sheet.

15. The method as claimed in claim 8, wherein said separator is placed in opening of said gasket for placing said unitary-formed electrode structures to sandwich said separator before said gasket is adhered with said unitary-formed electrode structures.

16. The method as claimed in claim 31, wherein said gasket is adhered with said unitary-formed electrode structures by a curing process.